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# Land Use/Land Cover Scenarios at USDA's Economic Research Service

Scott Malcolm  
USDA/ERS

USGCRP Workshop on U.S. Land Use/Land Cover Scenarios  
and Projections

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# How does ERS use LU/LC scenarios?

- *Major Land Uses Report*
  - An analysis of national and regional land use trends
- Environmental impacts
  - Erosion, water quality, carbon stock changes
  - Effectiveness/distribution of conservation practices
- Farm practices/Crop choice
- Market access





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# Drivers of LU/LC change

- Transportation/infrastructure investments
- Commodity prices
- Income
- Risk management policies
- Bioenergy policy
- Water policy
- Tax policy
- Property rights
- Global food production
- Climate change





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# Data we use

- Census of Agriculture
  - National Land Cover Dataset
  - Cropland Data Layer
  - National Resources Inventory
  - June Area Survey
  - Agricultural Resource Management Survey
  - Forest Inventory and Analysis data
  - SSURGO
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- Others as research needs/time/budget allow





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# Spatial/Temporal Scales

- Annual/Decadal
  - *including reconstructions of past LULCC as practical*
- County
  - To support program impact studies
- Field-level and farm-level
  - To support econometric studies





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# Important Outputs

- History/fate of agricultural land
- Urbanization
- Access to water
- Agricultural intensification
- Access to markets (producers and consumers)
  
- Conversion costs, hurdle rates
- Distributions of returns
- Technology adoption

